LETTERS
Who Reads the Journals?: R. B. Parker; How Children Learn to Read: D. Elkind; E. J. Gibson; Half-Life of Radiocarbon: F. Johnson .......................... 1325

EDITORIAL
Television Coverage of the Gemini Program .................................. 1329

ARTICLES
Solar Magnetic Fields: V. Bumba and R. Howard .......................... 1331
Study of solar magnetic fields shows the importance of large- and small-scale structure in solar activity.

Ant Venoms, Attractants, and Repellents: G. W. K. Cavill and P. L. Robertson ...... 1337
Secretions are used by ants in attack and defense and as chemical messengers in their social organization.

The Biophysical Problems of Photosynthesis: R. K. Clayton .................. 1346
Electrooptical techniques have brought clarification of physical and chemical events in photosynthesis.

NEWS AND COMMENT
Hospital Desegregation: HEW Criticized—Space: Orbiting Laboratory for Air Force .. 1355

BOOK REVIEWS

REPORTS
Electron Microscopy of Fossil Bacteria Two Billion Years Old: J. W. Schopf et al. .. 1365

Sands of the Mid-Atlantic Ridge: P. J. Fox and B. C. Heezen ................... 1367

Enrichment of Tritium by Thermal Diffusion and Measurement of Dated Antarctic Snow Samples: H. v. Buttlar and B. Wiik ........................................ 1371

Nuclear Mitochondria?: D. Brandes, B. H. Schofield, E. Anton ................... 1373
Mercurial-Induced Transformation of Myosin Prevented by Adenosine Triphosphate and Pyrophosphate: D. R. Kominz

Role of Orbital Cortex in Regulation of Thalamocortical Electrical Activity: M. Velasco and D. B. Lindsley


Sarcolemma: Transmitter of Active Tension in Frog Skeletal Muscle: S. F. Street and R. W. Ramsey

Iodination in Relation to Thyroglobulin Maturation and Subunit Aggregation: R. W. Seed and I. H. Goldberg

Fluorescent Contaminants from Plastic and Rubber Laboratory Equipment: H. A. Kordan

Fatty-Tissue Changes in Rats with Acclimatization to Altitude: C. M. Blatteis and L. O. Lutherer

Lymphocytes of Small Mammals: Spontaneous Transformation in Culture to Blastoids: S. M. Sabesin

Kinetin-Induced Chloroplast Maturation in Cultures of Tobacco Tissue: D. A. Stettler and W. M. Laetsch

Angiosperm Parasite and Host: Coordinated Dispersal: P. R. Atsatt


Stridulation in Leaf-Cutting Ants: H. Markl

Arterial Hypertension Elicited by Subpressor Amounts of Angiotensin: J. W. McCubbin et al.

Hemolysis Production in the Development of Staphylococcal Lesions: E. A. Foster

Comments on Reports: Melphalan Therapy and Exercise; Assessment of Drugs: N. Brock and B. Schneider; M. A. Schneiderman and M. H. Myers

MEETINGS

Electromagnetic Scattering: R. L. Rowell and R. S. Stein; Forthcoming Events

COVER

Electron micrograph of surface replica of fossil bacteria found in Gunflint chert approximately 2000 million years old. The polished rock surface was etched with hydrofluoric acid to dissolve the inorganic matrix; then it was shadowed and replicated with a platinum-carbon film. These well-preserved bacilli are morphologically similar to certain extant iron bacteria. They are among the most ancient fossils now known (about × 24,000). See page 1365. [Morton D. Maser, Harvard University]